

AMENDMENTS TO THE CLAIMS

1-51. (Canceled)

52. (Currently amended) An imager device, comprising:

a substrate having a plurality of photosensitive regions; and

a microlens array formed over the plurality of photosensitive regions, the microlens array comprising:

a first light conductor having a plurality of concave recesses, and

a second light conductor within each recess and over substantially planar surfaces formed between the concave recesses of the light conductor, the second light conductor being the top surface of the imager device, and wherein a portion of said second light conductor over said planar surface of said first light conductor has a thickness approximately equal to $\lambda/2 * N$, wherein λ refers to a particular wavelength of light entering the microlens, and N refers to an index of refraction associated with the second light conductor, the planar surface capable of reducing cross-talk between adjacent photosensitive regions by spectral reflectance.

53-55. (Canceled)

56. (Previously presented) The imager device of claim 52, wherein the first light conductor has a first index of refraction and the second light conductor has a second index of refraction that is different from the first index of refraction.

57. (Previously presented) The imager device of claim 52, wherein the first index of refraction is less than the second index of refraction.

58. (Previously presented) The imager device of claim 52, wherein at least one of the first and second light conductors is formed of material selected from the group consisting of glass, an optical thermoplastic material, a polyimide, a thermoset resin, a photosensitive gelatin, and a radiation curable resin.

59. (New) The imager device of claim 52, further comprising a color filter formed below the first light conductor.

60. (New) The imager device of claim 52, wherein the photosensitive region is a photosensor having a p⁺ type region formed over an n- type region.

61. (New) The imager device of claim 52, further comprising a shielding layer formed below the first light conductor.

62. (New) The imager device of claim 52, wherein at least one microlens in the array has a focal point that is off-center in relation to an underlying respective photosensitive region.